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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/535,602	12/12/2005	Tooru Inaguma	52433/796	7256

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KENYON & KENYON LLP  
ONE BROADWAY  
NEW YORK, NY 10004

EXAMINER
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LAVILLA, MICHAEL E

ART UNIT	PAPER NUMBER
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1794

NOTIFICATION DATE	DELIVERY MODE
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10/10/2007

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

uspto@kenyon.com

## Office Action Summary

**Application No.**

10/535,602

**Applicant(s)**

INAGUMA ET AL.

**Examiner**

Michael La Villa

**Art Unit**

1775

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 13 September 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) 11-35 and 37-42 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 May 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 20050519, 20060123.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☒ Other: IDS 20060530.

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election of Group I in the reply filed on 13 September 2007 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election **without** traverse (MPEP § 818.03(a)).
2. The requirement is still deemed proper and is therefore made FINAL.
3. Claims 11-35 and 37-42 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 13 September 2007.

### ***Information Disclosure Statement***

4. Document JP 57-071898 A, cited in the IDS filed on 23 January 2006, has not been considered because no relevance, either by summary or translation, has apparently been provided.
5. Crossed out references cited in the IDS filed on 30 May 2006 are indicated as being considered in the IDS filed on 19 May 2005.

### ***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:
7. The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 1-10 and 36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
9. Regarding Claim 1, it is unclear what is meant by the phrase construction, "characterized by comprising . . . with the remainder consisting of." It is unclear whether this should be read in any manner other than open language permitting other ingredients. Does "consisting of" limit the possibilities of additional ingredients in any manner? To the extent that this language is limiting, it is unclear how to reconcile such a limitation with the additional ingredients recited in dependent claims using the language "further comprises."
10. Regarding Claim 3, it is unclear what is meant by the phrase construction, "either or both . . . and . . . as well as . . ." It is unclear whether, in addition to one or both of Ti and Nb, each of La, Ce, and P must be present, whether, in addition to one or both of Ti and Nb, one, two, or three of La, Ce, and P must be present, whether one or more of Ti, Nb, La, Ce, and P must be present, or whether some other scope of coverage is being claimed.
11. Regarding Claim 8, it is unclear whether the claimed thickness values pertain to the claimed article or to the stainless steel sheet without the adhering aluminum layer.
12. Regarding Claim 9, it is unclear what is the antecedent basis of the phrase "said Al or Al alloy," as Claim 7 does not contain any reference to this limitation. The preamble of this claim also lacks antecedent basis.

13. Regarding Claim 10, it is unclear what is the antecedent basis of the phrase "the sheet thickness." It is unclear whether this refers to the thickness of the claimed article or to the stainless steel sheet without adhering aluminum layer.

***Claim Rejections - 35 USC § 102***

14. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

15. A person shall be entitled to a patent unless –

16. (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

17. Claims 1-4, 6, 8, 9, and 36 are rejected under 35 U.S.C. 102(b) as being anticipated by Shimizu et al. JP 4-350148. Shimizu et al. teaches a stainless steel foil of the claimed ingredients, wherein the foil is used for catalyst carrying honeycomb bodies for exhaust gas purification. Shimizu et al. teaches making double-layered Al and stainless steel laminate, which is diffusion treated to obtain stainless steel foil of the claimed ingredients in the claimed relative amounts.

See Shimizu et al. (paragraphs 12-18; and Table 1).

18. Claims 1 and 5-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Emmerich et al. EP 0 392 203. Emmerich et al. EP 0 392 203 teaches a stainless steel foil having the claimed amounts of iron, chromium, aluminum, and magnesium and having the claimed thickness. See Emmerich et al. (page 3; Table 1, final entry; and Table 2).

***Claim Rejections - 35 USC § 103***

19. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

20. (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

21. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

22. Claims 7, 9, 10, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimizu et al. JP 4-350148. Shimizu et al. teaches a stainless steel foil of the claimed ingredients, wherein the foil is used for catalyst carrying honeycomb bodies for exhaust gas purification. Shimizu et al. teaches making double-layered Al and stainless steel laminate, which is diffusion treated to obtain stainless steel foil of the claimed ingredients in the claimed relative amounts. See Shimizu et al. (paragraphs 12-18; and Table 1). Shimizu et al. may not exemplify the honeycomb body as claimed, but teaches that the foils of Shimizu et al. are effective for this purpose. It would have been obvious to one of

ordinary skill in the art at the time of the invention to use the foils of Shimizu et al. as the claimed honeycomb body, as Shimizu et al. teaches that the foils are effective for this purpose. Shimizu et al. does not teach the specifically claimed thickness, but does teach 50 microns thickness. Shimizu et al. teaches sheets of any effective thickness can be prepared as desired. It would have been obvious to one of ordinary skill in the art at the time of the invention to prepare sheets of thicknesses slightly thinner than those exemplified because there is no patentable distinction to be discerned based on slight variations in shape through slight variation in thickness and because thinner foils can provide a lighter honeycomb body. It would have been obvious to one of ordinary skill in the art at the time of the invention to vary the thickness with the aluminum-coated substrates as well. It would be expected that the additional thickness of the aluminum layer, which would contribute at most 6 or 7 weight percent in the final article, would be small and that the resulting bi-layered laminate would meet the claim thickness requirements as well. With respect to Claim 9, Shimizu may not teach including the claimed alloying ingredients in the aluminum layer, but does teach that any ingredient element in the final composition of Shimizu et al. may be included in the aluminum alloy layer and that some of these claimed elements, such as Zr, for example, are present in the alloy of Shimizu et al. It would have been obvious to one of ordinary skill in the art at the time of the invention include these additional ingredients as alloying elements in the

aluminum layer of Shimizu et al. since Shimizu et al. suggests that this is an effective manner of introducing such elements into the final foil article.

23. Claims 7 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimizu et al. JP 4-350148 in view of Sato et al. EP 0 497 992. Shimizu et al. teaches a stainless steel foil of the claimed ingredients, wherein the foil is used for catalyst carrying honeycomb body for exhaust gas purification. Shimizu et al. teaches making double-layered Al and stainless steel laminate, which is diffusion treated to obtain stainless steel foil of the claimed ingredients in the claimed relative amounts. See Shimizu et al. (paragraphs 12-18; and Table 1). Shimizu et al. does not teach the specifically claimed thickness, but does teach 50 microns thickness. Shimizu et al. teaches sheets of any effective thickness can be prepared as desired. Sato et al. teaches that foils of the claimed thickness are effective. See Sato et al. (Abstract; and page 4, lines 26-33). It would have been obvious to one of ordinary skill in the art at the time of the invention to prepare sheets of the claimed thickness, as Sato et al. teaches that foils of these thicknesses are effective for making honeycomb bodies used for the purpose of Shimizu et al. It would have been obvious to one of ordinary skill in the art at the time of the invention to vary the thickness with the aluminum-coated substrates as well. It would be expected that the additional thickness of the aluminum layer, which would contribute at most 6 or 7 weight percent in the final article, is small and that the resulting bi-layered laminate would meet the claim requirements.



**EXAMINER'S COMMENT**

24. A translation of Shimizu et al. JP 4-350148 has been ordered from Translations Branch.

25. A translation of Emmerich et al. EP 0 392 203 has been ordered from Translations Branch.

***Conclusion***


26. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael La Villa whose telephone number is (571) 272-1539. The examiner can normally be reached on Monday through Friday.

27. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jennifer McNeil can be reached on (571) 272-1540. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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28. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Michael La Villa  
26 September 2007

  
MICHAEL E. LAVILLA PH.D.  
PRIMARY EXAMINER